



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/520,004	12/29/2004	Raymond Hallot	33900-169PUS	7014
27799 7590 06/24/2009 COHEN, PONTANI, LIEBERMAN & PAVANE LLP 551 FIFTH AVENUE SUITE 1210 NEW YORK, NY 10176				
EXAMINER				
HOOK, JAMES F				
ART UNIT		PAPER NUMBER		
3754				
MAIL DATE		DELIVERY MODE		
06/24/2009		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/520,004

Applicant(s)

HALLOT ET AL.

Examiner

James F. Hook

Art Unit

3754

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 May 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) 3-5, 9, 15-23, 25, 26 and 28-33 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 6-8, 10-14, 24 and 27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 6, 7, 10, 11, 13, 14, 24, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baylot (WO 00/40886) in view of Nelson. The reference of Baylot discloses the recited device for thermally insulating at least one undersea pipe comprising a thermally insulating covering 4 made of a phase change material including an alkane material combined with wax provided around pipes 1, a second insulating layer 2 also provided around the pipes 1, an outer leak proof case 3₁ as seen in figure 15 to be rectangular in shape and thus meeting the limitations of claim 24 and 27, and where the pipe is surrounded in a continuous manner, where the phase change material meets all of the requirements of claims 10 and 13. The reference to Baylot discloses all of the recited structure with the exception of providing a container around the insulation layer within the outer protective case. The reference to Nelson discloses that it is old and well known in the art of insulated pipes to provide an insulation, a leak proof

protective case 270 surrounding a pipe 256a, where the insulation can be separated by flexible containers 270 to protect the insulation where the casing is prefabricated and the insulation is provided therein to protect the insulation, especially when such is provided as a liquid or loose material insulation. It would have been obvious to one skilled in the art to modify the insulation in Baylot by providing coating layers to act as flexible containers for the insulation layers as suggested by Nelson where such teaches the equivalence of using prefabricated containers for surrounding and protecting insulation especially when such is a liquid form or loose material where there are added beneficial qualities that are provided by the container where one skilled in the art would find it obvious to provide a layer if desired as Nelson suggests to protect the insulation from damage thereby saving money in replacement costs.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Baylot (WO 00/40886) in view of Nelson as applied to claims 1, 2, 6, 7, 10, 11, 13, 14, 24, and 27 above, and further in view of Ohrn (438). The reference to Baylot as modified discloses all of the recited structure with the exception of specifically using the phase change material inside of the second insulation. The reference to Ohrn discloses that it is old and well known in the art to provide a pipe 12 with an insulation material including an inner phase change insulation layer 22, and a second outer insulation layer 24 of conventional insulation, where a outer case 14 is provided. It would have been obvious to one skilled in the art to modify the insulation layers in Baylot as modified such that the phase change material was located inside of the second insulation material as suggested by Ohrn where such is an alternate form of providing insulation to a pipe in

subsea applications, where the outer insulation layer helps retain and protect the phase change material thereby insuring better temperature control of the inner pipe.

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Baylot (WO 00/40886) in view of Nelson as applied to claims 1, 2, 6, 7, 10, 11, 13, 14, 24, and 27 above, and further in view of Davis. The reference to Baylot as modified discloses all of the recited structure with the exception of disclosing the use of heptacosane as the phase change material. The reference to Davis discloses that it is old and well known in the art of phase change materials to use heptacosane as a known phase change insulating material. It would have been obvious to one skilled in the art to modify the phase change material in Baylot as modified to be of any equivalent form of phase change material including heptacosane as suggested by Davis which teaches this is an old and well known phase change material used in insulation layers and would provide an alternate material having different properties than the alkane used in Sigmund as modified.

Response to Arguments

Applicant's arguments with respect to claims 1, 2, 6-8, 10-14, 24, and 27 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The reference to Russum disclosing a state of the art prefabricated container for insulation.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James F. Hook whose telephone number is (571) 272-4903. The examiner can normally be reached on Monday to Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Shaver can be reached on (571) 272-4720. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/James F. Hook/
Primary Examiner, Art Unit 3754

JFH